

**Please enter the following claims:**

1-47. (canceled)

48. (currently amended) A method of making a ~~non-human~~ transgenic female mouse animal, comprising the steps of:

(a) providing a recombinant nucleic acid ~~according to claim 43 comprising;~~

i. a Tet operator response element;

ii. a nucleic acid encoding ovine FSH $\beta$  operatively associated with said Tet operator response element;

iii. an FSH $\beta$  promoter;

iv. an FSH $\beta$  locus control region operatively associated with said FSH $\beta$  promoter; and

v. a nucleic acid encoding a ligand-controllable receptor operatively associated with said FSH $\beta$  promoter, wherein said ligand-controllable receptor is a tetracycline-controllable transactivator fusion protein, and wherein tetracycline or an analog thereof acts as a ligand for said transactivator fusion protein; and wherein said receptor binds to said Tet operator response element in the presence of said ligand when expressed in a host cell; and

(b) introducing said nucleic acid construct into a fertilized mouse mammalian oocyte;

(c) implanting said oocyte in a pseudopregnant female mouse animal; and then

(d) raising said transgenic female mouse animal to viability from said oocyte in said host;

wherein said transgenic female mouse animal produces greater levels of FSH $\beta$  and greater numbers of oocytes gametes when administered said ligand than when not administered said ligand.

49-50. (canceled)

51. (original) The method of claim 48, wherein said introducing step is carried out by microinjection.

52. (original) The method of claim 48, wherein said nucleic acid comprises linear nucleic acid.

53-56. (canceled)

57. (currently amended) A method of enhancing the production of gametes oocytes in a transgenic mouse, non human animal, comprising the steps of:

(a) providing a transgenic mouse of claim 48, and non human animal, said animal comprising cells that contain:

- (i) a response element;
- (ii) a nucleic acid encoding FSH $\beta$  operatively associated with said response element; [.]
- (iii) an FSH $\beta$  promoter;
- (iv) an FSH $\beta$  locus control region operatively associated with said FSH $\beta$  promoter; and
- (v) a nucleic acid encoding a ligand controllable receptor operatively associated with said FSH $\beta$  promoter, wherein said receptor binds to said response element in the presence of said ligand when expressed in a host cell;

(b) administering said ligand to said mouse animal in an amount effective to (i) stimulate the production of FSH $\beta$  in said mouse animal above that found in a corresponding untransformed animal; and (ii) stimulate the production of gametes oocytes in said mouse animal to a level greater than that found in the corresponding untransformed mouse animal.

58-60. (canceled)

61. (currently amended) The method of claim 57 60, further comprising the step of harvesting said oocytes from said animal.

62. (currently amended) The method of claim 57 60, wherein said administering step is followed by the step of:

(c) mating said mouse animal to produce a litter of offspring therefrom, the size of said litter being greater than the size of a litter produced by the corresponding untransformed mouse animal.

63. (currently amended) The method of claim 57, wherein said administering step is carried out by feeding said ligand to said mouse animal.

64-70. (canceled)